PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or	ngent's file referenc	ce			
VALS 939 B PCT		FOR FURTHER A	ACTION	See Form PCT/IPEA/416	
International application No. Inte		International filing d	ate (day/month/year)	Priority date (day/month/year)	
PCT/FR2004/002005 27.0		27.07.200)4	04.08.2003	
International Pa	atent Classification	(IPC) or nati	onal classification and	IPC	
B05B1/	34				
Applicant					
VALOIS	SAS				
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			ninary examination re e applicant according		is International Preliminary Examining Authority
2. This	REPORT consists	of a total of	7	sheets, includ	ling this cover sheet.
3. This	report is also accor	npanied by A	NNEXES, comprising	:	
a. [2	(sent to the c	applicant and	to the International B	ureau) a total of 2	sheets, as follows:
					n amended and are the basis for this report and/or
	sheets				Rule 70.16 and Section 607 of the Administrative
					onsiders contain an amendment that goes beyond ed in item 4 of Box No. I and the Supplemental
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b. <u>L</u>	(sent to the l	International i	Bureau only) a total of	(indicate type and num	ber of electronic carrier(s))
					. containing a sequence listing and/or tables
			readable form only, a rative Instructions).	as indicated in the Supp	plemental Box Relating to Sequence Listing (see
4. This	report contains ind	ications relati	ng to the following ite	ms:	
\boxtimes	Box No. I	Basis of the	report		
	Box No. II	Priority			
	Box No. III	•	shment of opinion wit	h regard to novelty linve	entive step and industrial applicability
	Box No. IV		y of invention		
	Box No. V			35(2) with regard to no	welty, inventive step or industrial applicability;
	BOX NO. V		l explanations support		Tony, in tolar to stop of manorital appreciation,
	Box No. VI	Certain doc	uments cited		
\boxtimes	Box No. VII	Certain defe	ects in the internationa	l application	
	Box No. VIII	Certain obs	ervations on the intern	ational application	
Date of submis	sion of the demand	1		Date of completion of	this report
					•
Name and mailing address of the IPEA/EP				Authorized officer	
Facsimile No.				Telephone No.	

Translation

International application No.
PCT/FR2004/002005

Bo	x No. I	I	Basis of the report		
1.	Wit	h regard cated un	to the language, this report is based on the internation	onal application in the language in	which it was filed, unless otherwise
		which	eport is based on translations from the original langua is the language of a translation furnished for the purp international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4 international preliminary examination (Rule 55.2 and	ooses of:	
2.	rece	iving Oj report): the int	to the elements of the international application, this fice in response to an invitation under Article 14 are ernational application as originally filed/furnished scription:	report is based on (replacement we referred to in this report as "a	sheets which have been furnished to the originally filed" and are not annexed to
		pages	1-7		as originally filed/furnished
		page s	-	received by this Authority on	
		page s*		received by this Authority on	
	\boxtimes	the cla	ims:		
		nos.			as originally filed/furnished
		nos.*			er with any statement) under Article 19
		nos.*	1-9		06.06.2005 with letter
		nos.*			
	\boxtimes	the dra	wings:	, , , ,	
	K3	sheets	1/0 0/0		
		sheets			as originally filed/furnished
		sheets			
	П				
1		a seque	ence listing and/or any related table(s) — see Supplem	ental Box Relating to Sequence L	isting.
3.	Ш		nendments have resulted in the cancellation of:		
		吕 '	he description, pages		
		<u></u>	he claims, nos.		
		\sqsubseteq	he drawings, sheets/figs		
İ			he sequence listing (specify):		
			nny table(s) related to sequence listing (specify):		
4.		This re	eport has been established as if (some of) the amend ave been considered to go beyond the disclosure as fi	lments annexed to this report and led, as indicated in the Supplement	I listed below had not been made, since ntal Box (Rule 70.2(c)).
		\sqcup	he description, pages		
		<u></u> ⊢	he claims, nos.		
		<u></u> ∟ ,	he drawings, sheets/figs		
		<u></u> ,	he sequence listing (specify):	-1-P-1	
			nny table(s) related to sequence listing (specify):		
*	If ite	m 4 app	lies, some or all of those sheets may be marked "sup		

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1.	Statement		
	Novelty (N)	Claims 2, 3, 5, 7, 8, 9 Claims 1, 4, 6	YES NO
	Inventive step (IS)	Claims 5, 8, 9 Claims 2, 3, 7	YES NO
	Industrial applicability (IA)	Claims 1-9 Claims	YES NO

2. Citations and explanations (Rule 70.7)

Claim 1

1. In spite of the clarifications submitted by the applicant in the letter dated 3 June 2005 and received 6 June 2005, claim 1 does not fulfil the requirement of novelty defined in PCT Article 33(2), for the following reasons:

Document FR-A-2 774 367 (D1), which is considered to be the closest prior art, discloses (see page 2, line 18 to page 3, line 29; page 9, line 13 to page 10, line 30 and figures 5 to 7):

a spray head for a fluid, comprising a discharge channel provided with a spray port (35) and a spray profile that is formed in the bottom wall of said discharge channel and comprises non-radial spray channels (26) in communication with a central spray chamber (25) directly upstream from said port (13), wherein the central axis of said port (35) is offset by less than 0.12 mm, and preferably less than 0.08 mm, relative to the central axis of said

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

chamber (25).

Port 35 (the dispensing hole) is "perfectly centred" relative to swirl chamber 25. This corresponds to an offset of 0 mm between axes X and Y. An offset of 0 mm is less than 0.12 mm and 0.08 mm.

Claims 2 and 3

2. The dimensions specified in claims 2 and 3 are well known in the prior art. Document FR-A-2 446 311 (D2) describes a dispensing head that has a port and a swirl chamber of which the diameters are the same as those indicated in claims 2 and 3. Other documents also mention the same dimensions for ports and swirl chambers (see, for example, US-A-4 036 439, EP-A-0 412 524, US-A-5 711 488, etc.).

It follows that the spray head as per claims 2 and 3 is not considered to involve an inventive step.

Claims 4 and 6

3. The clarification provided in the letter of 3 June 2005 according to which the claimed spray heads are "unitary" (produced in a single piece) is not clearly supported by claim 4. The expression "... produced using the same mould cavity ..." can also refer to a mould cavity that has two recesses for producing two separate parts. As a result, the

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prior art in document D1 remains highly pertinent.

Since document D1 envisages either a dispensing device comprising the spray head described therein or the series-production of said same spray heads by means of moulding, all of the spray heads as per claim 4 and the dispensing device as per claim 6 do not, in so far as they are dependent on claim 1, fulfil the requirement of novelty in PCT Article 33(2) for the same reasons as set out in point 1 above. In so far as claims 4 and 6 are dependent on claim 2 and/or claim 3, they do not fulfil the requirement of inventive step defined in PCT Article 33(3).

Claim 7

4. Document US-A-5 378 422 (D3) discloses (see page 4, line 62 to column 5, line 68 and figure 4) a production machine for spray heads, which machine comprises at least one mould provided with at least one head-moulding cavity, and a pin (28) for each moulding cavity, wherein the front surface of said pin has a profile that matches the spray profile of said head and consists of projections that define the non-radial channels and the spray chamber. Said pin further includes a punch for forming the port.

It would be obvious for a person skilled in the art, aware of the spray head in D1 and the machine in D3, to adapt the machine as per D3 so that it

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		PC1/FR2C
Box No. VII	Certain defects in the international application	

The following defects in the form or contents of the international application have been noted:

6. Contrary to the requirements of PCT Rule 5.1(a)(ii), the description does not indicate the relevant prior art disclosed in documents D1, D2 and D3, nor does it cite said documents.